

## CLAIMS

What is claimed is:

1. A method for controlling access to image metadata, comprising the steps of:

- (a) defining metadata elements for an image;
- (b) associating users who will access the image with roles;
- 5 (c) associating the roles with individual metadata elements;
- (d) receiving a request for access to the metadata by a particular user, wherein the user's role is determined from the request; and
- (e) comparing the user's role to the roles associated with the metadata elements to determine which metadata elements to make available to the user.

10 2. The method of claim 1 further including the step of assigning access privileges to each of the roles.

15 3. The method of claim 2 further including the step of allowing the user to read, write, or modify the metadata based on the access privilege of the user's role.

20 4. The method of claim 3 further including the step of assigning user IDs to the users and to the individual metadata elements.

5        The method of claim 4 further including the step of receiving the user's ID in the request and using the user's ID to determine the user's role.

5        6        The method of claim 5 further including the step of associating a list with each metadata element, the list including roles assigned to the metadata element and corresponding access privileges.

10        7        The method of claim 6 further including the step of denying the request if the role assigned to the user does not match any of the roles assigned to the metadata elements.

15        8        The method of claim 7 further including the step of denying the request if access privileges assigned to the user do not match the access privilege assigned to the metadata element.

20        9        A system for controlling access to image metadata comprising:  
             means for defining metadata elements for an image;  
             means for associating users who will access the image with roles;  
             means for associating the roles with individual metadata elements;  
             means for receiving a request for access to the metadata by a particular user, wherein the user's role is determined from the request; and  
             means for comparing the user's role to the roles associated with the metadata elements to determine which metadata elements to make available to the

user.

10 The system of claim 9 wherein access privileges are assigned to each of the roles.

5

11 The system of claim 10 wherein the user is allowed to read, write, or modify the metadata based on the access privilege of the user's role.

10 12 The system of claim 11 wherein user IDs are assigned to the users and to the individual metadata elements.

13 The system of claim 12 wherein the user's ID is received in the request and using the user's ID to determine the user's role.

15 14 The system of claim 13 wherein a list is associated with each metadata element, the list including roles assigned to the metadata element and corresponding access privileges.

20 15 The system of claim 14 wherein the request is denied if the role assigned to the user does not match any of the roles assigned to the metadata elements.

16 The system of claim 15 wherein the request is denied if access privileges assigned to the user do not match the assess privilege assigned to the metadata element.

5 17 A computer readable medium containing program instructions for controlling access to image metadata, the instructions for:

- (a) defining metadata elements for an image;
- (b) associating users who will access the image with roles;
- (c) associating the roles with individual metadata elements;
- 10 (d) receiving a request for access to the metadata by a particular user, wherein the user's role is determined from the request; and

(e) comparing the user's role to the roles associated with the metadata elements to determine which metadata elements to make available to the user.

15 18 The computer readable medium of claim 17 further including the instruction of assigning access privileges to each of the roles.

19 The computer readable medium of claim 18 further including the instruction of allowing the user to read, write, or modify the metadata based on the access privilege of the user's role.

20 20 The computer readable medium of claim 19 further including the instruction of assigning user IDs to the users and to the individual metadata

elements.

21 The computer readable medium of claim 20 further including the instruction of receiving the user's ID in the request and using the user's user ID to determine the user's role.

22 The computer readable medium of claim 21 further including the instruction of associating a list with each metadata element, the list including roles assigned to the metadata element and corresponding access privileges.

23 The computer readable medium of claim 22 further including the instruction of denying the request if the role assigned to the user does not match any of the roles assigned to the metadata elements.

24 The computer readable medium of claim 23 further including the instruction of denying the request if access privileges assigned to the user do not match the access privilege assigned to the metadata element.

25 A method for controlling access to image metadata, comprising the steps of:

- (a) defining metadata elements for an image file;
- (b) associating particular roles with individual metadata elements;
- (c) assigning each role certain access privileges for the metadata

element to which the access privileges are associated;

(d) assigning particular roles to users who will access the image;

(e) after the image file being populated with data and stored, receiving a request to access the image and its metadata, wherein the role assigned to the user is determined from the request; and

(f) comparing the role assigned to the user with the roles associated with the metadata elements in the image file to determine what metadata elements to make available to the user for reading, writing or modifying.

26 The method of claim 25 further including the step of associating a list with at least one metadata element that indicates the roles that are allowed to access that metadata element and the access privileges defining what type of access allowed.

27 The method of claim 26 further including the step of determining whether to grant or deny access to the metadata by:

for each metadata element, querying the corresponding list to determine if the list contains the role assigned to the user;

if the user's role is not found in the list, denying access to that metadata element;

if the user's role is found in a list, then determining if the type of access requested matches one of the access privileges in the list defined for that role;

if the type of access requested matches one of the access privileges in the list, returning data corresponding to the metadata element to the user as requested; and

5 if the type of access requested does not match one of the access privileges in the list, denying the request to access the image metadata.

28 The method of claim 27 further including the step of storing the roles and access privileges associated with the metadata in the image file.

10 29 The method of claim 27 further including the step of storing the roles and access privileges in a file separate from the image file.

30 A method for controlling access to image metadata, comprising the steps of:

15 (a) defining metadata elements for an image;  
(b) associating users who will access the image with IDs;  
(c) associating the IDs with individual metadata elements;  
(d) receiving a request for access to the metadata by a particular user, wherein the request includes the user's ID; and

20 (e) comparing the user's ID to the IDs associated with the metadata elements to determine which metadata elements to make available to the user.

31 The method of claim 30 further including the step of assigning access

privileges to each of the IDs associated with the metadata elements.

32 The method of claim 31 further including the step of allowing the user to read, write, or modify each metadata element when the user's ID matches the ID associated with each metadata element.

33 A network server for controlling access to image file metadata, comprising:

means for storing a plurality of image files, each of the image files having metadata elements defined therein and data populating each of the metadata elements, each of the image files further including a list of roles and access privileges associated with each of the metadata elements;

means for receiving a request for one of the image files from a user, wherein the user is assigned at least one role;

means for determining the role assigned to the user from the request; and

means for comparing the role assigned to the user with the roles associated with the metadata elements in the image file to determine what metadata elements to make available to the user.